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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,523	11/28/2003	Tung-Hung Tsai	MR3315-6	7569
4586	7590	11/17/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			PERT, EVAN T	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/722,523

Applicant(s)

TSAI ET AL.

Examiner

Evan Pert

Art Unit

2829

*Handwritten signature*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. Applicant's specification is replete with improper idiomatic English. A substitute specification is required, in proper English.

Furthermore, the heading "Summary of Invention" at line 26 of page 3 should be moved above line 8.

### ***Claim Objections***

2. The claims include improper idiomatic English, starting at the claim 1 preamble.

Most notably, applicant uses the term "grain" in a very unusual and unconventional way: As understood from applicant's specification, the "grain" in the claims is commonly and *properly* called a "chip" or "die" in the semiconductor industry [spec. page 1, lines 16-18], but may not necessarily be so limited by applicant's pending claims.

### ***Drawings***

3. Fig. 3 is objected to for improper idiomatic English, particularly at step 606.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Crownover (US 3,915,850):

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Regarding claims 1 through 4, Crownover discloses a method of dynamic positioning coding (i.e. a computer memory dynamically assigns a grade to a plurality of chips in a matrix of positions), in a grain (i.e. chip) pick-up (col. 1, line 15) process comprising steps of: picking up first and second grains (i.e. 1st, 2nd, 3rd, 4th, etc. chips are picked up and put in a test tray having ejector mechanisms), wherein the N chips in the tray are graded in groups, which are sequentially put in like bins of like grades all at once.

Regarding claim 6, the "go-no-go test" of Crownover is a "yield test" [col. 2, lines 14-17].

Regarding claim 7, first and second bins divide grains into defective and non-defective by go-no-go testing, which is yield testing [col. 2, lines 14-17].

Regarding claim 8, the "first" bin is the natural number "1" and the second bin is the natural number "2".

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crownover, as applied to claim 3 above, and further in view of Official Notice.

Crownover is silent about how the grains (i.e. chips) are moved from the tray when ejected, particularly by "at least one robotic arm," as claimed.

The examiner takes Official Notice that robot arms are notoriously well known in the industry for the purpose of automation and efficiency.

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have used "at least one robot arm" to move a group of ejected chips in Crownover to an exclusively designated bin in Crownover, motivated by the notoriously well known benefits of automation and efficiency given by "robot arms."

***Allowable Subject Matter***

6. The prior art does not seem to disclose applicant's invention characterized in that, in a sorting method for sorting semiconductor chips, each destination bin of each different grade of chip is assigned during chip testing, such that the first chip tested determines the grade designation of the closest bin [p. 3].

***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan Pert whose telephone number is 571-272-1969. The examiner can normally be reached on M-F (7:30AM-3:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ETP  
November 12, 2004

  
**EVAN PERT**  
**PRIMARY EXAMINER**